

In the Claims:

Sub E1) 1. (CURRENTLY AMENDED) A mortar grouting type joint for reinforcing bars, comprising a hollow cylindrical body having an opening cover (2) at an end, a bolt hole (8) on the side wall, and first and second longitudinally oriented supporting protrusions (5) on the inner peripheral wall, adapted to support reinforcing bars (12) with bolts (13) and the supporting protrusions (5), wherein:

the portion of the inner peripheral wall between the first and second supporting protrusions is substantially linear;

at least a first of the supporting protrusions (5) consists of a pair of thin-walled members extending in the longitudinal direction of the hollow cylindrical body, wherein the contact points of each of said thin-walled members with said peripheral wall define a line substantially parallel to a line defined by the contact points of the corresponding thin-walled member with said peripheral wall; and

said thin-walled members each have a ridge line (7) sloping toward the opening cover (2), with the portion of the thin-walled member supporting the reinforcing bar (12) inserted through the opening cover (2) constituting the apex.

2. (ORIGINAL) A mortar grouting type joint for reinforcing bars according to claim 1, wherein the hollow cylindrical body has an opening cover (2) at both ends thereof, with a supporting protrusion (5) supporting each reinforcing bar (12) inserted through each opening cover being provided on both sides.

3. (PREVIOUSLY AMENDED) A mortar grouting type joint for reinforcing bars according to claim 1, wherein each of the pair of thin-walled members constituting the supporting protrusion (5) has an angle ridge line (7) sloping on both sides with the portion supporting the reinforcing bar (12) constituting the apex.

4. (PREVIOUSLY AMENDED) A mortar grouting type joint for reinforcing bars according to claim 1, wherein the bolt hole (8) is situated between the first supporting protrusion (5) and the opening cover (2).

5. (PREVIOUSLY AMENDED) A mortar grouting type joint for reinforcing bars according to claim 1, wherein the bolt hole (8) is situated in the portion of the cylindrical body side wall facing to the first supporting protrusion (5).

6. (PREVIOUSLY AMENDED) A mortar grouting type joint for reinforcing bars according to claim 1, wherein:

the distance between the reinforcing bar supporting portions (6) of the pair of thin-walled members is smaller than the diameter of the reinforcing bar (12); and

the distance between the reinforcing bar supporting portion (6) and the cylindrical body central axis is substantially equal to the radius of the circular hole (3) of the opening cover (2).

7. (PREVIOUSLY AMENDED) A mortar grouting type joint for reinforcing bars according to claim 1, wherein the bolt hole (8) is provided in the vicinity of the point at which the straight line passing through the midpoint between the reinforcing bar supporting portions (6) of the pair of thin-walled members and the central axis of the hollow cylindrical body intersects the inner wall of the hollow cylindrical body.

8. (PREVIOUSLY AMENDED) A mortar grouting type joint for reinforcing bars according to claim 1, wherein the line segment connecting the contact points of each of the pair of thin-walled members and the cylindrical body inner wall is arranged perpendicularly to the thin-walled members, the pair of thin-walled members extending parallel to each other.

9. (PREVIOUSLY AMENDED) A mortar grouting type joint for reinforcing bars according to claim 1, wherein the line segment connecting the contact points of the pair of thin-walled members and the cylindrical body inner wall is arranged perpendicularly to the thin-walled members, the distance between the pair of thin-walled members increasing continuously from the reinforcing bar supporting portions (6) toward the opening cover (2) side of the hollow cylindrical body.

10. (PREVIOUSLY AMENDED) A mortar grouting type joint for reinforcing bars according to claim 1, wherein the angle made by the line segment connecting contact points of the pair of thin-walled members and the inner wall of the hollow cylindrical body and by the thin-walled members constitute an acute angle, the pair of thin-walled members being parallel to each other.

11. (PREVIOUSLY AMENDED) A mortar grouting type joint for reinforcing bars according to claim 1, wherein the angle made by the line segment connecting the contact points of the pair of thin-walled members and the inner wall of the hollow cylindrical body and by the thin-walled members constitute an acute angle, the distance between the pair of thin-walled members increasing continuously from the reinforcing bar supporting portions (6) toward the both ends of the hollow cylindrical body.

12. (PREVIOUSLY AMENDED) A mortar grouting type joint for reinforcing bars according to claim 1, wherein the diameter of the circular hole (3) of the opening cover (2) is the same as the diameter of the reinforcing bar (12) inserted into the joint, or an appropriate clearance is provided between the circular hole (3) of the opening cover (2) and the reinforcing bar (12) inserted into the joint.

13. (PREVIOUSLY AMENDED) A mortar grouting type joint for reinforcing bars according to claim 1, wherein a seal member mounting portion is integrally attached to the outer side of the opening cover (2).

14. (PREVIOUSLY AMENDED) A mortar grouting type joint for reinforcing bars according to claim 1, wherein each of the facing surfaces of the pair of thin-walled members has a dip angle which facilitates the guiding of the reinforcing bar (12).

15. (CURRENTLY AMENDED) A mortar grouting type joint for reinforcing bars, comprising a hollow cylindrical body having an opening cover (2) at a first [an] end and further having a second end, a bolt hole (8) on the side wall, and first and second supporting protrusions (5) on the inner peripheral wall, adapted to support reinforcing bars (12) with bolts (13) and the supporting protrusions (5), wherein:

each supporting protrusion (5) consists of a pair of thin-walled members extending in the longitudinal direction of the hollow cylindrical body; and

[the portion of the inner peripheral wall between the first and second supporting protrusions is substantially linear];

said thin-walled members each [have a ridge line (7) sloping] decrease in height toward ends of the joint [the opening cover (2)], with the portion of each [the] thin-walled member supporting a [the] reinforcing bar (12) inserted in the joint [through the opening cover (2)] constituting the apex; and

engagement of the thin-walled members with the reinforcing bars aligns the reinforcing bars in a substantially coaxial fashion.

16. (ORIGINAL) A mortar grouting type joint for reinforcing bars according to claim 15, wherein the line segment connecting the contact points of the pair of thin-walled members and the cylindrical body/inner wall is arranged perpendicularly to the thin-walled members, the distance between the pair of thin-walled members increasing continuously from the reinforcing bar supporting portions (6) toward the opening cover (2) side of the hollow cylindrical body.

17. (NEW) A mortar grouting type joint for reinforcing bars, comprising a hollow cylindrical body having an opening cover (2) at an end, a bolt hole (8) on the sidewall, and a supporting protrusion (5) on the inner peripheral wall, adapted to support reinforcing bars (12) with a bolt (13) and the supporting protrusion (5), wherein:

the supporting protrusion (5) consists of a pair of thin-walled members extending in the longitudinal direction of the hollow cylindrical body; and

said thin-walled members each have a ridge line (7) sloping toward the opening cover (2), with the portion of the thin-walled member supporting the reinforcing bar (12) inserted through the opening cover (2) constituting the apex; and

wherein the bolt hole (8) is provided in the vicinity of the point at which the straight line passing through the midpoint between the reinforcing bar supporting portions (6) of the pair of thin-walled members and the central axis of the hollow cylindrical body intersects the inner wall of the hollow cylindrical body.

18. (NEW) A mortar grouting type joint for reinforcing bars, comprising a hollow cylindrical body having an opening cover (2) at an end, a bolt hole (8) on the sidewall, and a supporting protrusion (5) on the inner peripheral wall, adapted to support reinforcing bars (12) with a bolt (13) and the supporting protrusion (5), wherein:

the supporting protrusion (5) consists of a pair of thin-walled members extending in the longitudinal direction of the hollow cylindrical body; and

said thin-walled members each have a ridge line (7) sloping toward the opening cover (2), which the portion of the thin-walled member supporting the reinforcing bar (12) inserted through the opening cover (2) constituting the apex; and

wherein the line segment connecting the contact points of each of the pair of thin-walled members and the cylindrical body inner wall is arranged perpendicularly to the thin-walled members, the pair of thin-walled members extending parallel to each other.

19. (NEW) A mortar grouting type joint for reinforcing bars, comprising a hollow cylindrical body having an opening cover (2) at an end, a bolt hole (8) on the sidewall, and a supporting protrusion (5) on the inner peripheral wall, adapted to support reinforcing bars (12) with a bolt (13) and the supporting protrusion (5), wherein:

the supporting protrusion (5) consists of a pair of thin-walled members extending in the longitudinal direction of the hollow cylindrical body; and

said thin-walled members each have a ridge line (7) sloping toward the opening cover (2), with the portion of the thin-walled member supporting the reinforcing bar (12) inserted through the opening cover (2) constituting the apex; and

wherein the line segment connecting the contact points of the pair of thin-walled members and the cylindrical body inner wall is arranged perpendicularly to the thin-walled members and the cylindrical body inner wall is arranged perpendicularly to the thin-walled members, the distance between the pair of thin-walled members increasing continuously from the reinforcing bar supporting portions (6) toward the opening cover (2) side of the hollow cylindrical body.

20. (NEW) A mortar grouting type joint for reinforcing bars, comprising a hollow cylindrical body having an opening cover (2) at an end, a bolt hole (8) on the sidewall, and a supporting protrusion (5) on the inner peripheral wall, adapted to support reinforcing bars (12) with a bolt (13) and the supporting protrusion (5), wherein:

the supporting protrusion (5) consists of a pair of thin-walled members extending in the longitudinal direction of the hollow cylindrical body; and

said thin-walled members each have a ridge line (7) sloping toward the opening cover (2), with the portion of the thin-walled member supporting the reinforcing bar (12) inserted through the opening cover (2) constituting the apex; and

wherein the angle made by the line segment connecting contact points of the pair of thin-walled members and the inner wall of the hollow cylindrical body and by the thin-walled members constitutes an acute angle, the pair of thin-walled members being parallel to each other.

21. (NEW) A mortar grouting type joint for reinforcing bars, comprising a hollow cylindrical body having an opening cover (2) at an end, a bolt hole (8) on the sidewall, and a supporting protrusion (5) on the inner peripheral wall, adapted to support reinforcing bars (12) with a bolt (13) and the supporting protrusion (5), wherein:

the supporting protrusion (5) consists of a pair of thin-walled members extending in the longitudinal direction of the hollow cylindrical body; and

said thin-walled members each have a ridge line (7) sloping toward the opening cover (2), with the portion of the thin-walled member supporting the reinforcing bar (12) inserted through the opening cover (2) constituting the apex; and

wherein the angle made by the line segment connecting the contact points of the pair of thin-walled members and the inner wall of the hollow cylindrical body and by the thin-walled members constitutes an acute angle, the distance between the pair of thin-walled members increasing continuously from the reinforcing bar supporting portions (6) toward the both ends of the hollow cylindrical body.

22. (NEW) A mortar grouting type joint for reinforcing bars, comprising a hollow cylindrical body having an opening cover (2) at an end, a bolt hole (8) on the

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sidewall, and a supporting protrusion (5) on the inner peripheral wall, adapted to support reinforcing bars (12) with a bolt (13) and the supporting protrusion (5), wherein:

the supporting protrusion (5) consists of a pair of thin-walled members extending in the longitudinal direction of the hollow cylindrical body; and

said thin-walled members each have a ridge line (7) sloping toward the opening cover (2), with the portion of the thin-walled member supporting the reinforcing bar (12) inserted through the opening cover (2) constituting the apex; and

wherein a seal member mounting portion is integrally attached to the outer side of the opening cover (2).
